

Lake Clarity Crediting Program Making the Transition

California Regional Water Quality
Control Board
Lahontan Region

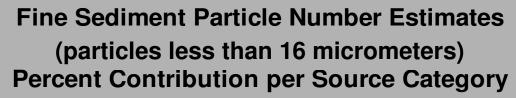
Robert Larsen Environmental Scientist

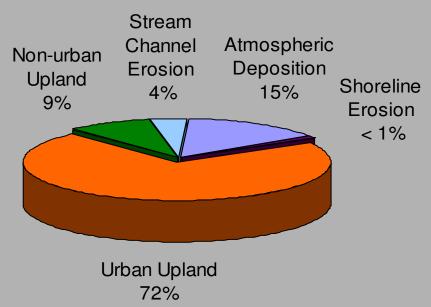


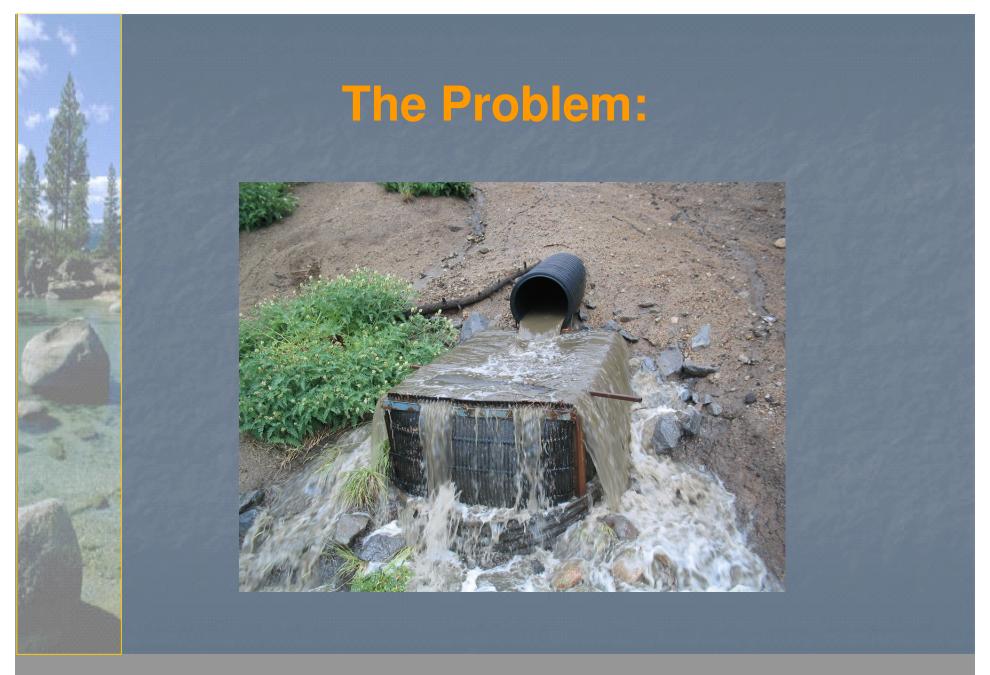
Presentation Overview

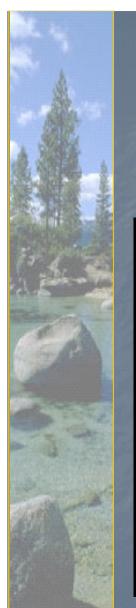
- 1. Why we need the Crediting Program
- 2. Program overview
- 3. How the Water Board plans to use the Crediting Program

Remember this?





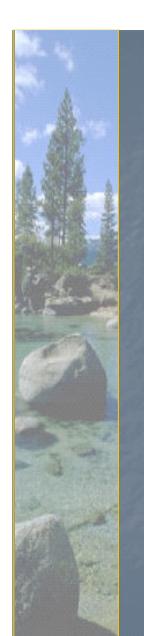




Recommended Strategy

Percent Reduction of Basin-wide Particle Load

Pollutant Source Category	Recommended Strategy Load Reduction
Forest Uplands	1.0%
Stream Channel Erosion	1.8%
Atmospheric Deposition	4.6%
Urban Uplands	24.5%
Clarity Challenge	32%

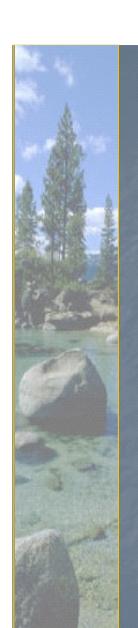


Are we there yet?

Projects have been built, more than \$1B invested, lands have been restored

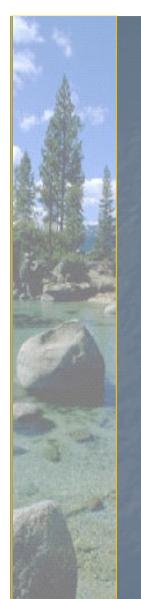
Hours put into O&M, planning, and regulatory compliance

Undefined benefit to Lake Tahoe
Is everyone doing their part?
Have obligations been met?
Are we doing this right?



Lake Clarity Crediting Program Overview





What is the Lake Clarity Credit?

A means to define the relationship between actions and average annual load reductions

Fine sediment particles
Total Nitrogen
Total Phosphorus

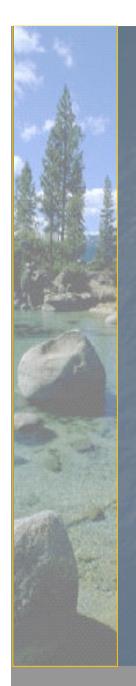
Initial focus is on fine sediment particles Estimate, track, and report N and P



What is the Lake Clarity Credit?

One (1) Lake Clarity Credit = 1 x 10¹⁶ fine sediment particles (<16 micrometer)

One (1) Lake Clarity Credit = Approx: 200 lbs of FSP 1 1/4 cubic feet



Credit Characteristics

Estimated annual average load reduction

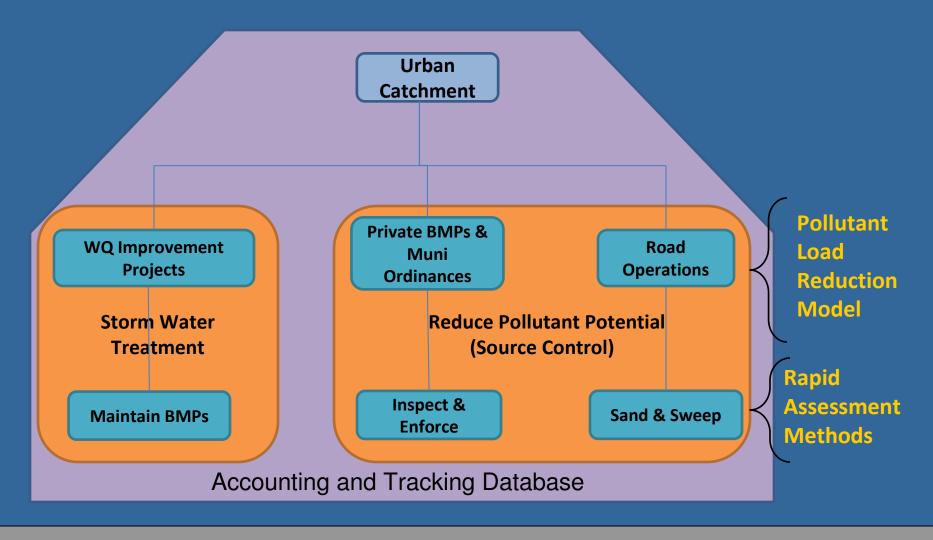
Not Measured, Not Monitored

Accounted and reported on an annual basis

Distributable – can be shared among urban jurisdictions

Determined by consistent estimation tools

Lake Clarity Crediting Program & Implementation Tools





Crediting Program Approach

Prioritize effective actions and provide flexibilty

Award Credit for a variety of actions
Water quality improvement projects
Operational activities
Ordinances & programs
Innovative practices & alternative actions



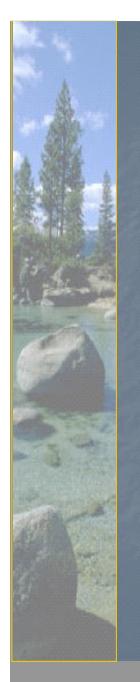
Crediting Program Approach



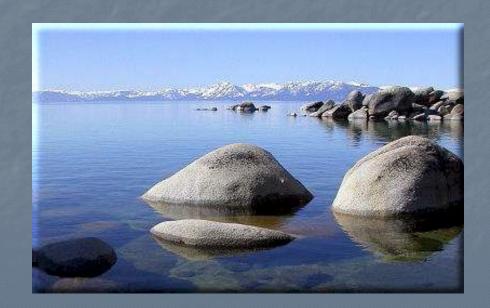
Provide regulatory stability

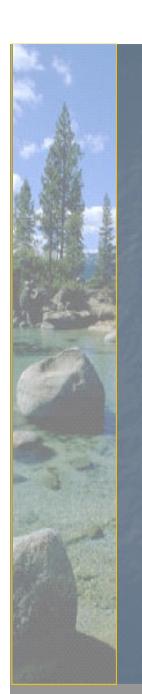
Enable program adjustments

Incorporate the latest monitoring/science



Lake Clarity Crediting Program and California Stormwater Permits





TMDL Stormwater Regulatory Approach

Emphasize average annual mass-based load reductions

Identify and target actions in highpolluting watersheds

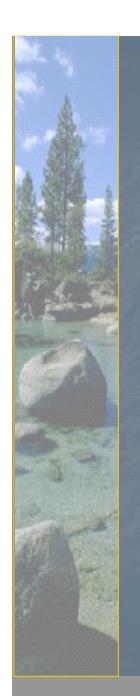
Link proposed actions to expected pollutant load reductions

Stormwater Regulation Approach

	Existing Policy
Regulatory Focus	Concentration limits – everywhere, all the time
Compliance Prospects	Not reasonable – even advanced measures may not meet effluent limits
Linkage between actions/benefits	Poor - hard to link projects/actions to lake clarity response
Comparability	Little ability to compare results across different implementers

Stormwater Regulation Approach

	Existing Policy	Proposed Approach
Regulatory Focus	Concentration limits – everywhere, all the time	Load limits – average annual
Compliance Prospects	Not reasonable – even advanced measures may not meet effluent limits	Reasonable – possible demonstrate progress toward achieving stated goals
Linkage between actions/benefits	Poor - hard to link projects/actions to lake clarity response	Strong – TMDL load reductions directly related to clarity response
Comparability	Little ability to compare results across different implementers	Direct performance comparisons, transparent through reporting



CA Stormwater Permits

Current Municipal Stormwater Permit expires Oct. 2010

Caltrans Statewide Stormwater Permit is due for update

CWA requires TMDL allocations be incorporated into NPDES permits

Permit updates will include TMDL allocations for CA jurisdictions



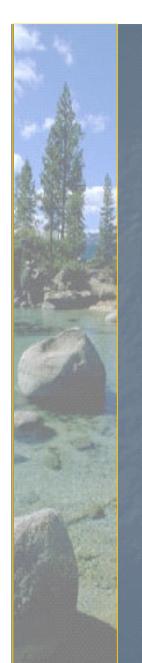
What the new Permit will *likely* include

5-Year load reduction requirements

Annual load reduction requirements

Updated SWMPs describing how needed load reductions will be met

Annual Monitoring and Reporting requirements based on the Crediting Program Handbook

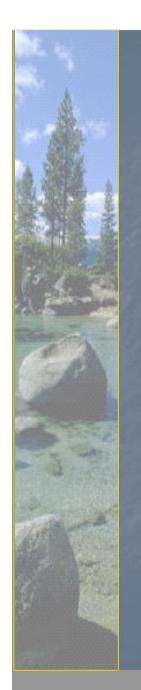


What the new Permit will *likely* <u>not</u> include

20 year, 1-hour design storm requirements

Concentration based numeric effluent limits

Prescriptive operations and maintenance requirements



Process

Permit will be drafted with Permittee and stakeholder input

Beta test period will help refine credit accounting and tracking tools

Staff to bring the Permit before the Water Board in October 2010

